Dear Fourth Grade Families,

We are about to begin our 3rd Module in Mathematics. In this letter we will share a grade-specific overview of the year and information about the current module your child is working on.

**Summary of the Year**

Our Fourth Grade students will be engaged in mathematics that will focus on:

 (1) Developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends;

(2) Developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers;

(3) Understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

The learning goal for each student is to *achieve mastery by the end of the school year*. Along the way teachers and students will celebrate what the students can do now and identify what the students need to work on next.

**A Story of Units**

The yearly curriculum is broken into modules, (units), whose sequence is as follows:

Module 1: Place Value, Rounding, and Algorithms for Addition and Subtraction

Module 2: Unit Conversions and Problem Solving with Metric Measurement

**Module 3: Multi-Digit Multiplication and Division**

Module 4: Angle Measure and Plane Figures

Module 5: Fraction Equivalence, Ordering and Operations

Module 6: Decimal Fractions

Module 7: Exploring Multiplication

As your child begins a new module, you will receive information explaining the learning targets that are being addressed

**Module 3 Overview**

In Module 3, measurements provide the concrete foundation behind the distributive property in the multiplication algorithm: 4 × (1 m 2 cm) can be made physical using ribbon, where it is easy to see the 4 copies of 1 m and the 4 copies of 2 cm. Likewise, 4 × (1 ten 2 ones) = 4 tens 8 ones. Students then turn to the place value table with number disks to develop efficient procedures for multiplying and dividing one-digit whole numbers and use the table with number disks to understand and explain why the procedures work. Students also solve word problems throughout the module where they select and accurately apply appropriate methods to estimate, mentally calculate, or use the procedures they are learning to compute products and quotients.

If at any time throughout the Module 3, you have any questions or concerns regarding your children’s progress, please feel free to contact his or her teacher.

Sincerely,

MUFSD 4th Grade Teachers

**Module 3 Objectives:**

The following objectives will be addressed in Module 3, however many are ongoing and will reappear in future modules.

* Multiply a multi-digit number by a one-digit whole number
* Demonstrate multiplication of two two-digit numbers using rectangular arrays, place value, and area model
* Solve multiplication of two two-digit numbers using rectangular arrays, place value and the area model
* Explain my chosen strategy
* Demonstrate division of a multi-digit number by a one-digit number using place value, rectangular arrays, and area model
* Solve division of a multi-digit number by a one-digit number using properties of operations and equations
* Explain how a multiplication equation (e.g., 35 = 5 x 7) can be interpreted as a comparison (e.g., Johnny has 5 times as many cards as Bill who has 7 cards)
* Write an equation for a situation involving multiplicative comparison
* Distinguish between multiplicative (as many as) and additive (more) comparisons
* Can determine when to multiply or divide in word problems
* Solve a multiplication or division word problem involving multiplicative comparison using drawings and equations
* Write an equation using a variable to represent the unknown
* Choose the correct operation to perform at each step of a multi-step word problem
* Interpret remainders in word problems
* Write equations using a variable to represent the unknown
* Use mental math or estimation strategies to check if my answer is reasonable
* Define factors and multiples
* List all of the factor pairs for any whole number in the range 1-100
* Determine multiples of a given whole number 1-100
* Define prime and composite
* Determine if a number is prime or composite